APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,388	09/26/2003	Phil Van Dyke	VP089	8514

20178	7590	01/11/2005

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EXAMINER
HARRISON, CHANTE E

ART UNIT .	PAPER NUMBER
2672	

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/672,388	VAN DYKE ET AL.
	Examiner	Art Unit	
	Chante Harrison	2672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>26 September 2003</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-32</u> is/are pending in the application.

     4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-32</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

     a)☐ All   b)☐ Some *   c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

     * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>9/26/03</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

2.   Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Shimotono et al., US 6,369,826 B1, 4/2002.

As per independent claim 1, Shimotono discloses a memory for storing a first set of

display data, the first set of display data including a set of key data associated with a

key data value (col. 3, II. 23-30); an input for receiving a second set of display data (col.

3, II. 35-38); an output for transmitting a set of output display data (Fig. 3 "133"); and a

component configured to compare a portion of the first set of display data to the key

data value to determine whether the portion of the first set of display data is to be

modified with a corresponding portion of the second set of display data (col. 4, II. 15-20,

40-45).

Shimotono fails to specifically disclose a comparison component. Shimotono

teaches a shutter circuit that receives a read signal indicating the existence of a

key color and determines designation of an overlay of image data in response to the read signal.

It would have been obvious to one of skill in the art to incorporate a comparison component with the disclosure of Shimotono because basing a shutter circuit selection of image data to be overlaid upon a first image on the dependence of the existence of a key color value suggests that a determination or comparison of image data to a key color value is made.

As per dependent claims 2 and 24, Shimotono discloses the comparison component is configured to modify the portion of the first set of display data with the corresponding portion of the second set of display data during a transmission of the first set of display data to the output (col. 4, II. 50-54).

As per dependent claim 3, Shimotono discloses the second set of display data represents image data (col. 2, II. 3-10). Shimotono fails to specifically disclose the image data transmitted from a camera.

Shimotono teaches receiving moving image data output through use of a shutter function.

It would have been obvious to one of skill in the art to incorporate image data transmitted from a camera with the disclosure of Shimotono because shutter functions are used by cameras to capture and transmit images.

As per dependent claim 4, Shimotono discloses the second set of display data includes a signal, the comparison component defined to use the signal for determining when to start comparing the portion of the first set of display data to the key data value (col. 4, ll. 20-23, 40-45).

Shimotono fails to specifically disclose a synchronization signal.

Shimotono discloses a capture circuit for capturing the moving image includes a reading circuit that provides a frame timing signal used by the key color detection circuit to detect the existence of a key color and determine replacement of first display data.

It would have been obvious to one of skill in the art to incorporate a synchronization signal with the disclosure of Shimotono because the use of a frame timing signal to determine when a key color value is relative to a location in a first display data suggests that the frame timing signal determines a time at which the key color and display data is synchronized and occupies the same position. Thus the frame timing signal corresponds to a synchronization signal.

As per dependent claim 5, Shimotono fails to specifically disclose a liquid crystal display (LCD) panel, the LCD panel configured to receive the set of output display data, wherein the LCD panel includes a memory region (col. 1, ll. 45-55).

As per dependent claims 6, 16 and 29, Shimotono discloses the key data value is a single color value (col. 1, ll. 54-56; col. 3, ll. 30-34)

As per dependent claim 7, Shimotono discloses the set of key data is defined to occupy

a size, a shape, and a location within the first set of display data (col. 3, ll. 35-41; col. 4,

ll. 40-42).

Shimotono fails to specifically disclose the size, shape and location are variable.

Shimotono teaches determining the area, size and position of key color data for

each frame of image data.

It would have been obvious to one of skill in the art to incorporate key data of

variable size, shape and location with the disclosure of Shimotono because making a

determination of the size, shape and location of the key color data for each image frame

suggests that the key color data does not maintain a designated size, shape and

location; and therefore the characteristics of the key color data may vary.

As per dependent claims 8, 17 and 28, Shimotono discloses the set of key data defines

a picture-in-picture window (Fig. 3 "133").

As per dependent claim 9, Shimotono discloses the comparison component is

configured to modify the portion of the first set of display data with the corresponding

portion of the second set of display data prior to a transmission of the first set of display

data to the output (col. 4, ll. 50-54).

As per dependent claims 10, 18 and 30, Shimotono discloses an encoding component capable of receiving the set of output display data and converting the set of output display data to a digital format suitable for storage (col. 5, ll. 44-45).

As per dependent claims 11, 19 and 31,1 Shimotono discloses modifying the portion of the first set of display data includes replacing the portion of the first set of display data with the corresponding portion of the second set of display data (Fig. 3 "211 & 133").

As per dependent claims 12, 20 and 32, Shimotono discloses modifying the portion of the first set of display data includes performing a logical operation using the portion of the first set of display data and the corresponding portion of the second set of display data (col. 4, ll. 50-54; col. 5, ll. 38-44).

As per independent claim 13, Shimotono discloses a memory region configured to store display data, the display data having key data integrated therein (col. 1, ll. 48-55); and comparison circuitry configured to receive both image overlay data from a source external to the memory region and the display data from the memory region according to a signal (col. 4, ll. 14-20, 40-45), the comparison circuitry further configured to modify the key data with the image overlay data during transmission of the display data to a display panel (col. 4, ll. 50-54).

Shimotono fails to specifically disclose a synchronization signal.

Shimotono discloses a capture circuit for capturing the moving image includes a reading circuit that provides a frame timing signal used by the key color detection circuit to detect the existence of a key color and determine replacement of first display data.

It would have been obvious to one of skill in the art to incorporate a synchronization signal with the disclosure of Shimotono because the use of a frame timing signal to determine when a key color value is relative to a location in a first display data suggests that the frame timing signal determines a time at which the key color and display data is synchronized and occupies the same position. Thus the frame timing signal corresponds to a synchronization signal.

As per dependent claims 14 and 25, Shimotono discloses the image overlay data is a video stream (Fig. 6; col. 3, ll. 35-38)).

As per dependent claim 15, Shimotono discloses wherein the comparison circuitry is configured to compare the display data to a key data value to identify a location of the key data within the display data (col. 4, ll. 40-47).

As per independent claim 21, Shimotono discloses establishing a first portion of a first set of display data with key data, the key data being defined by a key data value (col. 3, ll. 23-30); receiving a second set of display data (col. 3, ll. 35-38), the second set of display data defining an image having a shape and a size (col. 3, ll. 35-40); the second portion of the first set of display data representing the shape and the size of the image

defined by the second set of display data (col. 3, ll. 35-41; Fig. 3 "Key Color"); modifying

the key data within the first portion of the first set of display data with corresponding

portions of the second set of display data (col. 4, ll. 50-54); and transmitting the first set

of display data to a display component (Fig. 3 "133").

Shimotono fails to specifically disclose comparing a second portion of the first set

of display data to the key data value.

The rationale as applied in the rejection of independent claim 1 applies herein.

As per dependent claim 22, Shimotono discloses wherein modifying the key data with

corresponding portions of the second set of display data is performed with the first set of

display contained within a memory (Fig. 3; col. 1, ll. 50-55).

As per dependent claim 23, Shimotono discloses the second set of display data

represents a single frame of image data (i.e. overlay of image data is performed on a

frame by frame basis) (col. 3, ll. 41-45).

As per dependent claim 26, the rationale applied in the rejection of claim 13 applies

herein.

As per dependent claim 27, the rationale as applied in the rejection of claim 7 applies
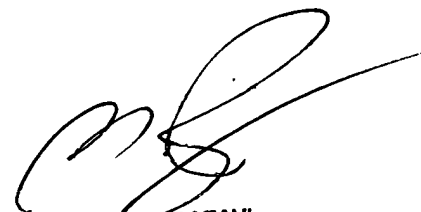
herein.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chante Harrison whose telephone number is 703-305-3937. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on 703-305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chante Harrison
Examiner
Art Unit 2672

Ceh
January 5, 2005

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